

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of
BENOIT SALIOU ET AL.
Serial No.: 10/518,844
Filed: DECEMBER 21, 2004

Atty. Docket: FR 020068
CONF. NO.: 1283
Examiner: TAE K. KIM
Group Art Unit: 2453

TITLE: SOFTWARE DOWNLOAD INTO A RECEIVER

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF

Sir:

Appellants herewith respectfully present its Brief on Appeal
as follows:

REAL PARTY IN INTEREST

The real party in interest is Koninklijke Philips Electronics N.V., a corporation of The Netherlands having an office and a place of business at Groenewoudseweg 1, Eindhoven, Netherlands 5621 BA.

RELATED APPEALS AND INTERFERENCES

To the best of Appellants' knowledge and belief, there are no related appeals or interferences.

STATUS OF CLAIMS

Claims 1, 2, 4-8 and 12-15 are pending in this application. Claims 3 and 9-11 are canceled. Claims 1, 2, 4-8 and 12-15 are rejected in the Final Office Action that issued January 22, 2009. This rejection was upheld in an Advisory Action that mailed on April 9, 2009. Claims 1, 2, 4-8 and 12-15 are the subject of this appeal.

STATUS OF AMENDMENTS

An Amendment After Final Action was submitted on March 23, 2009 in response to a Final Office Action mailed on January 22, 2009. The Amendment After Final Action included amendments to the claims. In an Advisory Action mailed on April 9, 2009, it is indicated that the after Amendment After Final Action will be entered but the Amendment After Final action does not place the application in condition for allowance. This Appeal Brief is in response to the Final Office Action mailed on January 22, 2009, that finally rejected claims 1, 2, 4-8 and 12-15, which remain finally rejected in the Advisory Action mailed on April 9, 2009.

SUMMARY OF CLAIMED SUBJECT MATTER

The present invention, for example as claimed in claim 1, relates to a method of downloading software programs into a storage unit (e.g., see, present application, FIG. 2, and page 7, lines 18-19), the software programs including a boot code (BSL1) and an application code (Appl1), the boot code (BSL1) allowing downloading of the application code (Appl1, e.g., see, present application, page 2, lines 11-13), the storage unit comprising at least a current boot code in a first location (e.g., see, present application, FIG. 2, BSL1, and page 6, lines 29-30), the method comprising the following steps: upon a download request, downloading a new boot code in a second location, which does not overwrite the current boot code and does overwrite a current application code (e.g., see, present application, FIG. 2, BSL2, and page 7, lines 23-24), indicating that the new boot code in the second location replaces the current boot code (e.g., see, present application, page 7, lines 12-13), writing the new boot code in place of the current boot code in the first location, indicating that the new boot code written in the first location replaces the

new boot code written in the second location (e.g., see, present application, FIG. 2, step 4, and page 8, lines 6-7), downloading a new application code associated to the new boot code in a location, which does not overwrite the new boot code in the first location, indicating that the new application code is valid (e.g., see, present application, FIG. 2, step "end", and page 8, lines 12-13).

The present invention, for example as claimed in claim 2, relates to a method of downloading software programs including into a storage unit (e.g., see, present application, FIG. 2, and page 7, lines 18-19), the software programs including a boot code (BSL1) and an application code (Appl1), the boot code (BSL1) allowing downloading of the application code (Appl1), the storage unit comprising at least a current software program (Appl1) stored (see, present application, FIG. 2, Appli and page 7, lines 23-24) including a current boot code stored (BSL1) in the storage unit at a first position (e.g., see, present application, FIG. 2, BSL1, and page 6, lines 29-30), the method comprising the steps of: defining a boot sector for jumping to a position of the storage unit where a boot code is stored in order to validate the use of said boot code (e.g., see, present application, page 2, lines 27-28), the boot

sector initially pointing at the first position, where the current boot code is stored (e.g., see, present application, FIG. 2, step "Start", and page 7, lines 23-24), upon a download request, downloading a new software program (BSL2 plus Appli2) in a second position including a new boot code (BSL2) and a new application code (Appli2), wherein the second position includes a portion wherein a current application code is stored (e.g., see, present application, FIG. 2, BSL2, page 7, lines 23-24), jumping to the second position where the new boot code is stored (e.g., see, present application, page 8, lines 10-11), wherein the step of jumping to the second position where the new boot code is stored is followed by: replacing the current boot code with the new boot code at the first position, jumping to the first position (e.g., see, present application, FIG. 2, step "end", and page 8, lines 12-13).

It should be explicitly noted that it is not the Appellants' intention that the currently claimed device and method be limited to operation within the illustrative device and method described above beyond what is required by the claim language. Further description of the illustrative device and method is provided above indicating portions of the claims which cover the illustrative

device and method merely for compliance with requirements of this appeal without intending any further interpreted limitations be read into the claims as presented.

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

Whether claims 1, 2, 4-8 and 12-15 are unpatentable under 35 U.S.C. §103(a) over U.S. Patent Publication No. 2001/0011347 to Narayanaswamy ("Narayanaswamy") in view of U.S. Patent No. 6308,265 to Miller ("Miller").

ARGUMENT

Claims 1, 2, 4-8 and 12-15 are said to be obvious over
Narayanaswamy in view of Miller.

Appellants respectfully request the Board to address the patentability of independent claims 1 and 2, and further claims 4-8 and 12-15 as respectively depending from one of independent claims 1 and 2, based on the requirements of independent claims 1 and 2. This position is provided for the specific and stated purpose of simplifying the current issues on appeal. However, Appellants herein specifically reserve the right to argue and address the patentability of claims 4-8 and 12-15 at a later date should the separately patentable subject matter of claims 4-8 and 12-15 later become an issue. Accordingly, this limitation of the subject matter presented for appeal herein, specifically limited to discussions of the patentability of independent claims 1 and 2 is not intended as a waiver of Appellants' right to argue the patentability of the further claims and claim elements at that later time.

While the Advisory Action clarifies that "'original boot block' is synonymous with first location where the current boot code resides", it is still respectfully submitted that Narayanaswamy has little to do with the teaching of the present application as recited in the claims. It is respectfully submitted that Narayanaswamy merely shows a memory system that utilizes two boot code units 22, 24, one being active and the other being inactive (see, Narayanaswamy, FIG. 2, paragraph [0018]). Narayanaswamy maintains each of the boot code units with one storing an active boot code block and the other storing the inactive boot code block (see, Narayanaswamy, paragraph [0024]). New boot code is written into the boot code unit that is inactive and thereafter, the inactive boot code unit is made the active boot code unit (see, Narayanaswamy, FIG. 4A, paragraph [0027]).

It is undisputed that "Narayanaswamy does not disclose that the new boot code is downloaded in the section that has the current application code and overwrites the current application code. Nor does Narayanaswamy disclose of writing the new boot code in place of the current boot code in the first location, indicating that the new boot code written in the first location replaces the new boot

code written in the second location." (See, Final Office Action, page 8.)

Miller is cited to provide that which is admitted missing from Narayanaswamy, however, it is respectfully submitted that reliance on Miller is misplaced.

Miller shows a vastly different and incompatible solution to Narayanaswamy, wherein the original boot block is overwritten by a new boot block. In Miller, prior to writing over an existing boot block, a copy of the boot block from a first region (see, Miller, FIG. 2, block 200-1) is copied to another region (see, Miller, FIG. 2, block 200-2). After confirming that the original boot block and the copy are identical, new boot data is written over the original boot block (see, abstract and FIG. 3). Miller in FIG. 2 shows a memory in accordance with the teachings of Miller. In FIG. 2, the boot code block is stored in block 200-1 along with an updatable portion of the BIOS that extends from block 200-1 to 200-2 (see, Miller, Col. 5, lines 6-18). The original boot block and updatable portion of the BIOS is copied over the updatable portion of the BIOS that extends into the section 200-2 (see, Miller, FIG. 3, step 300, and col. 5, lines 52-55). Thereafter, the original boot block

is overwritten (erased during step 340 and updated during step 350) with new boot data.

Accordingly, neither of Narayanaswamy nor Miller disclose nor suggest the currently claimed solution as recited in the claims.

Each of these different and incompatible solutions ensures that a bootable system is available in case of problems with updating the boot code. Narayanaswamy does this by only writing over an inactive code block in the inactive code unit. Miller does this by copying the active boot code block from a first region to a second region, and then writing over the boot code block in the first region.

Accordingly, neither Narayanaswamy nor Miller individually or in combination teach, disclose or suggest the methods as recited in claims 1 and 2.

Further, while the Final Office Action finds many reasons for combining references (see, Final Office Action, pages 4-6), none of these reasons are expressed as the reason for the combination of Narayanaswamy with Miller. While a combination of Narayanaswamy with Miller may yield predictable results, it is respectfully submitted that since neither discloses nor suggests the elements of

the claims, where is the motivation for the selective modification to each disclosed method to end up with a system that is neither disclosed nor suggested by either alone or in combination.

It is respectfully submitted that for the above rejection, the Final Office Action cites a motivation to make the particular combination of selected portions of references that finds no support in the cited references.

The suggestion in the Final Office Action that the combinations of prior art references "would be obvious to one having ordinary skill in the art ... " is respectfully refuted.

The Advisory Action further states that "Incorporating the well known steps in Miller to Narayanaswamy ... allows the maximum amount of memory available within the memory device to be allocated for updating the main firmware" yet each of Narayanaswamy and Miller do not teach allowing the maximum amount of memory available and in fact, each provides good reasons for not maximizing allowable memory (e.g., Narayanaswamy, teaches an inactive memory area to facilitate updates as discussed above).

Appellants maintain that even in the face of the precedence provided by KSR, one may not utilize the teachings of the present

application as a road map to pick and choose amongst prior art references for the purposes of attempting to arrive at the presently disclosed invention.

The stated motivation for combining the references is nowhere recognized in the prior art and in fact, each of Narayanaswamy and Miller solve the problem stated as motivation albeit in different ways than as recited in the claims and therefore no such motivation exists.

Where a feature is not shown or suggested in the prior art references themselves, the Federal Circuit has held that the skill in the art will rarely suffice to show the missing feature. *Al-Site Corp. v. VSI International Inc.*, 174 F.3d 1308, 50 USPQ2d 1161 (Fed. Cir. 1999) (Rarely, however, will the skill in the art component operate to supply missing knowledge or prior art to reach an obviousness judgment).

It is respectfully submitted that even with the precedence provided by KSR, the mere fact that the prior art device could be modified so as to produce the claimed device, which in this case even in combination it does not, is not a basis for an obviousness rejection.

How can the Final Office Action espouse that this reconstruction forwarded does not include knowledge gleaned only from the applicant's disclosure? If this reconstruction did not come from the present application, where did it come from? The above reconstruction certainly did not come from the prior art since each of Narayanaswamy and Miller do not individually or together disclose or suggest the solution provided by the subject matter recited in the claims.

The Final Office Action further states that the motivation for combining Narayanaswamy and Miller finds that "[t]he motivation to do so is to will allow a larger amount of memory within the memory device to be allocated for the storage of the updated main firmware." (See, Final Office Action, page 9.) Yet again this position finds no support in either of Narayanaswamy or Miller. Further, there are innumerable ways to provide for a larger amount of memory, for example, why not simply provide for a larger memory since neither of Narayanaswamy or Miller are limited to a given memory size. It is respectfully submitted that making up some arbitrary motivation to arrive at a solution that is admittedly not shown by either of Narayanaswamy or Miller is not evidence of a

proper motivation for altering both of Narayanaswamy and Miller in a way that is not contemplated by either.

It is respectfully submitted that Narayanaswamy in view of Miller does not disclose or suggest, a system that amongst other patentable elements, comprises (illustrative emphasis provided) "a current boot code in a first location, the method comprising the following steps: upon a download request, downloading a new boot code in a second location, which does not overwrite the current boot code and does overwrite a current application code, indicating that the new boot code in the second location replaces the current boot code, writing the new boot code in place of the current boot code in the first location, indicating that the new boot code written in the first location replaces the new boot code written in the second location, downloading a new application code associated to the new boot code in a location, which does not overwrite the new boot code in the first location, indicating that the new application code is valid" as recited in claim 1, and as substantially recited in claim 2.

Based on the foregoing, the Applicants respectfully submit that independent claims 1 and 2 are patentable over Narayanaswamy

in view of Miller and notice to this effect is earnestly solicited. Claims 4-8 and 12-15 respectively depend from one of claims 1 and 2 and accordingly are allowable for at least this reason as well as for the separately patentable elements contained in each of the claims. Accordingly, separate consideration of each of the dependent claims is respectfully requested.

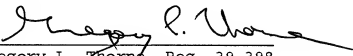
In addition, Appellants deny any statement, position or averment of the Examiner that is not specifically addressed by the foregoing argument and response. Any rejections and/or points of argument not addressed would appear to be moot in view of the presented remarks. However, the Appellants reserve the right to submit further arguments in support of the above stated position, should that become necessary. No arguments are waived and none of the Examiner's statements are conceded.

CONCLUSION

Claims 1, 2, 4-8 and 12-15 are patentable over Narayanaswamy in view of Miller.

Thus the Examiner's rejection of claims 1, 2, 4-8 and 12-15 should be reversed.

Respectfully submitted,

By 
Gregory L. Thorne, Reg. 39,398
Attorney for Appellants
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THORNE & HALAJIAN, LLP
Applied Technology Center
111 West Main Street
Bay Shore, NY 11706
Tel: (631) 665-5139
Fax: (631) 665-5101

APPENDIX A
CLAIMS ON APPEAL

1. (Previously presented) In a transmission system, a method of downloading software programs into a storage unit, the software programs including a boot code and an application code, the boot code allowing downloading of the application code, the storage unit comprising at least a current boot code in a first location, the method comprising the following steps: upon a download request, downloading a new boot code in a second location, which does not overwrite the current boot code and does overwrite a current application code, indicating that the new boot code in the second location replaces the current boot code, writing the new boot code in place of the current boot code in the first location, indicating that the new boot code written in the first location replaces the new boot code written in the second location, downloading a new application code associated to the new boot code in a location, which does not overwrite the new boot code in the first location, indicating that the new application code is valid.

2. (Previously presented) In a transmission system, a method of downloading software programs including into a storage unit, the software programs including a boot code and an application code, the boot code allowing downloading of the application code, the storage unit comprising at least a current software program stored including a current boot code stored in the storage unit at a first position, the method comprising the steps of: defining a boot sector for jumping to a position of the storage unit where a boot code is stored in order to validate the use of said boot code, the boot sector initially pointing at the first position, where the current boot code is stored, upon a download request, downloading a new software program in a second position including a new boot code and a new application code, wherein the second position includes a portion wherein a current application code is stored, jumping to the second position where the new boot code is stored, wherein the step of jumping to the second position where the new boot code is stored is followed by: replacing the current boot code with the new boot code at the first position, jumping to the first position.

3. (Canceled)

4. (Original) A method as claimed in claim 2, wherein the boot sector is located in a protected storage area of the storage unit.

5. (Original) A method as claimed in claim 2, wherein the boot sector is located in a protected storage area separate from the storage unit.

6. (Original) A method as claimed in claim 2, wherein the current boot code is stored in a protected area of the storage unit, which area can be unprotected to be overwritten under specific software conditions.

7. (Original) A method as claimed in claim 2, wherein the new software program is stored in an area of the storage unit, which area can be protected and unprotected to be overwritten under specific software conditions.

8. (Previously presented) A method as claimed in claim 2, wherein the new software program includes an intermediate

application code, which is a link between the current application code and the new application code enabling a user to parameterize the new software program.

9-11. (Canceled)

12. (Original) A transmission system comprising a transmitter for transmitting software programs and at least a receiver for receiving said software programs, the receiver comprising means for carrying out the method as claimed in any one of claims 1 to 8.

13. (Previously presented) A computer program stored on a computer readable memory device which when received by a receiver, configures the receiver to carry out the method as claimed in any one of claims 1 to 8.

14. (Previously presented) A computer program signal stored on a computer readable memory device, the computer program signal being arranged to configure a processor to carry out the method as claimed in claim 1.

15. (Previously presented) A method as claimed in one of claim 1 or 2, wherein the current boot code becomes an inactive boot code after the new boot code replaces the current boot code and wherein the new application code overwrites the inactive boot code.

APPENDIX B

Evidence on Appeal

None

Patent
Serial No. 10/518,844
Appeal Brief in Reply to Final Office Action of January 22, 2009
and Advisory Action of April 9, 2009

APPENDIX C

Related Proceedings of Appeal

None